

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

October 29, 2002

Dirk Kempthorne, Governor C. Stephen Alfred, Director

CERTIFIED MAIL No. 7099 3220 0009 1975 6988

Catherine Reno Supervisor, Air/Water Policy & Permitting Idaho National Engineering and Environmental Laboratory 850 Energy Drive Idaho Falls, ID 83401-1562

RE:

AIRS Facility No. 019-00048, INEEL Research Center Complex, Idaho Falls

Final Tier I Operating Permit No. 019-00048

Dear Ms. Reno:

The Idaho Department of Environmental Quality is issuing Tier I Operating Permit No. 019-00048 for the Idaho National Engineering and Environmental Laboratory Research Center in accordance with the Title V of the Clean Air Act and IDAPA 58.01.01:300 through 386, Rules for the Control of Air Pollution in Idaho (Rules).

The enclosed permit is effective immediately, summarizes the applicable requirements for your facility, and requires an annual compliance certification for all emissions units. The enclosed operating permit is based on the information contained in your permit application, received June 4, 2001. Modifications to and/or renewal of this operating permit shall be requested in a timely manner in accordance with the *Rules*.

Jorge Garcia of the Idaho Falls Regional Office will contact you regarding a meeting with the Department to discuss the permit terms and requirements. In addition to your facility's plant manager, the Department recommends the following representatives attend the meeting: your responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with the permit conditions.

You, as well as any other entity, may have the right to appeal this final agency action pursuant to IDAPA 58.01.23 (Rules of Administrative Procedure Before the Board of Environmental Quality). A petition may be filed with the Hearings Coordinator, Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255, within 35 days of the date of this decision. However, prior to filing a petition for a contested case, the Department encourages you to contact Bill Rogers at (208) 373-0502 or wrogers@deq.state.id.us to address any questions or concerns you may have with the enclosed permit.

Sincerely

Katherine B. Kell Administrator

Air Quality Division

CC:

Steve Winn, IRC, Idaho Falls Jorge Garcia, Idaho Falls Regional Office Stary Parts Technical Services Division

Joan Lechtenberg, Air Quality Division Laurie Kral, EPA Region 10

KK/tk Project No. T1-010908

G:\Air Quality\Stationary Source\SS Ltd\T1\INEEL - IRC\Fina\INEEL-IRC Final PL.doc

Enclosure



Air Quality TIER I OPERATING PERMIT

State of Idaho Department of Environmental Quality

PERMIT NO.: 019-00048

AQCR: 61

CLASS: B

SIC:

8733

ZONE: 12

UTM COORDINATE (km):

416.4, 4818.6

1. PERMITTEE

U.S. Department of Energy, Idaho Branch Office Idaho National Engineering and Environmental Laboratory Research Center Complex

2. PROJECT

Tier I Operating Permit

MAILING ADDRESS Department of Energy, Idaho Operations Office, 850 Energy Drive	CITY Idaho Falls	STATE ID	ZIP 83401-1562
FACILITY CONTACT Steve Winn	TITLE Site Area Director	TELEPHONE (208) 526-1075	·
5. RESPONSIBLE OFFICIAL W.E. Bergholz	TITLE Acting Manager, DOE Idaho	TELEPHONE (208) 526-2497	
B.D. Shipp	President, Bechtel BWXT Idaho, LLC	(208) 526-4600	
EXACT PLANT LOCATION 2351 North Boulevard, Idaho Falls, Idaho 83401		COUNTY Bonneville	

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS Research

8. PERMIT AUTHORITY

This Tier I operating permit is issued pursuant to Idaho Code §39-115 and the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.300 through 386. The permittee shall comply with the terms and conditions of this permit.

This permit incorporates all applicable terms and conditions of prior air quality permits issued by the Department of Environmental Quality for the permitted source, unless the permittee emits toxic pollutants subject to state-only requirements pursuant to IDAPA 58.01.01.210, and the permittee elects not to incorporate those terms and conditions into this operating permit.

The effective date of this permit is the date of signature by the Department on the cover page.

KATHERINE B. KELLY, ADMINISTRATOR, AIR QUALITY DIVISION

DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED: October 29, 2002

DATE EXPIRES: October 29, 2005

KK/MJS/tk

Project No. T1-010908

G:\AIR QUALITY\STATIONARY SOURCE\SS LTD\T1\INEEL - IRC\FINAL\INEEL-IRC FINAL OP.DOC

TABLE OF CONTENTS

LK	ST OF ACRONYMS, UNITS, AND CHEMICAL SYMBOLS	3
1.	TIER I OPERATING PERMIT SCOPE	4
2.	FACILITY-WIDE CONDITIONS	5
3.	RADIONUCLIDE SOURCES	13
	INSIGNIFICANT ACTIVITIES	
5.	TIER I OPERATING PERMIT GENERAL PROVISIONS	16

LIST OF ACRONYMS, UNITS, AND CHEMICAL SYMBOLS

AQCR Air Quality Control Region

ASTM American Society for Testing and Materials

Btu/hr British thermal units per hour

CAA Clean Air Act

CFR Code of Federal Regulations

Ci/yr curies per year

CO carbon monoxide

DOE U.S. Department of Energy

EPA U.S. Environmental Protection Agency

gr/dscf grains per dry standard cubic feet

hp horsepower

IDAPA a numbering designation for all administrative rules in Idaho promulgated in accordance with the

Idaho Administrative Procedures Act

INEEL Idaho National Engineering and Environmental Laboratory

IRC INEEL Research Center

kw kilowatt

lb/hr pounds per hour

MMBtu/hr million British thermal units per hour

mrem/yr millirem per year

NO_X nitrogen oxides

NSPS New Source Performance Standards

PM particulate matter

PM₁₀ particulate matter with an aerodynamic diameter of a nominal 10 micrometers or less

PTC permit to construct
PW process weight

PW process weight
SIC Standard Industrial Classification

SIP State Implementation Plan

SO₂ sulfur dioxide

U.S.C. United States Code

UTM Universal Transverse Mercator

VOC volatile organic compounds

Permittee: U.S. Department of Energy, Idaho Branch Office

Date Issued: October 29, 2002

Location: Idaho National Engineering and Environmental Laboratory

Date Expires: October 29, 2005

Research Complex, Idaho Falls, Idaho

•

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

1. TIER I OPERATING PERMIT SCOPE

Purpose

- 1.1 This Tier I operating permit establishes facility-wide requirements in accordance with the Rules for the Control of Air Pollution in Idaho.
- 1.2 This Tier I permit incorporates or references the following documents:
 - 40 CFR 61, Subparts A, H, and M
 - 40 CFR 68
 - 40 CFR 82, Subpart F

Regulated Sources

1.3 Table 1.1 lists all sources of emissions that are regulated in this Tier I operating permit.

Table 1.1 EMISSIONS SOURCES

Permit Section	Source Description	Emissions Control(s)	
3	Radionuclide sources	None	

Permittee: U.S. Department of Energy, Idaho Branch Office

Date Issued: October 29, 2002

Location:

Idaho National Engineering and Environmental Laboratory

Date Expires: October 29, 2005

Research Complex, Idaho Falls, Idaho

Date Expires. October 29, 2003

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

2. FACILITY-WIDE CONDITIONS

The following table contains a summary of requirements that apply generally to emissions units at the facility.

Table 2.1 SUMMARY OF APPLICABLE REQUIREMENTS

Permit Conditions	Parameter	Permit Limit/ Standard Summary	Applicable Requirements Reference	Monitoring & Recordkeeping Requirements
2.1	2.1 Fugitive Reasonable control		IDAPA 58.01.01.650-651	2.2, 2.3, 2.4, 2.19, 2.20
2.5	Odors	No emissions of odorous gas, liquids, or solids	IDAPA 58.01.01.775-776	2.6, 2.19, 2.20
2.7	Visible emissions	20% opacity for no more than three minutes in any 60- minute period	IDAPA 58.01.01.625	2.8, 2.19, 2.20
2.9	Excess emissions	Compliance with IDAPA 58.01.01.130-136	IDAPA 58.01.01.130-136	2.9.1-2.9.5, 2.19, 2.20
2.10	Open burning	Compliance with IDAPA 58.01.01.600-616	IDAPA 58.01,01.600-616	2.10
2.11	Renovation Compliance with 40 CER 61		40 CFR 61, Subpart M	2.11
2.12	Chemical accident prevention	Compliance with 40 CFR 68	40 CFR 68	2.12
2.13	Fuel huming Compliance with IDADA		IDAPA 58.01.01.676-677	2.19
2.14	Fuel oil sulfur content	ASTM Grade 1 fuel oil – 0.3% by weight; ASTM Grade 2 fuel oil - 0.5% by weight	IDAPA 58.01.01.728	2.19
2.15	Process weight rate	Compliance with IDAPA 58.01.01.701	IDAPA 58.01.01.701	2.15.1
2.16	Recycling and emissions reductions	Compliance with 40 CFR 82	40 CFR 82	2.16
2.21	Petroleum storage tanks	Compliance with 40 CFR 60, Subpart Kb	40 CFR 60, Subpart Kb	2.21.1, 2.21.2

Fugitive Emissions

2.1 All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.

[IDAPA 58.01.01.650-651, 5/1/94]

2.2 The permittee shall maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

Permittee: U.S. Department of Energy, Idaho Branch Office

Date Issued: October 29, 2002

Location: Idaho National Engineering and Environmental Laboratory

Date Expires: October 29, 2005

Research Complex, Idaho Falls, Idaho

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

2.3 The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

2.4 The permittee shall conduct a quarterly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions, to ensure that the methods used to reasonably control fugitive emissions are effective. There shall be a minimum of at least 60 days between each inspection. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each quarterly fugitive emission inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

[IDAPA 58.01.01.322.06, 07, 5/1/94; IDAPA 58.01.01.322.08, 4/5/00]

Odors

2.5 No person shall allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

[IDAPA 58.01.01.775, 776, 5/1/94]

2.6 The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

[IDAPA 58.01.01.322.06, 07 (state-only), 5/1/94]

Visible Emissions

2.7 No person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas is the only reason(s) for the failure of the emission to comply with the requirements of this section.

[IDAPA 58.01.01.625, 4/5/00]

The permittee shall conduct a quarterly facility-wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions. There shall be a minimum of at least 60 days between each inspection. The visible emissions inspection shall consist of a see/no see evaluation for each potential source of emissions. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in its annual compliance certification and in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each quarterly visible

Permittee: U.S. Department of Energy, Idaho Branch Office Date Issued: October 29, 2002

Location: Idaho National Engineering and Environmental Laboratory
Research Complex, Idaho Falls, Idaho

Date Expires: October 29, 2005

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

emission inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

[IDAPA 58.01.01.322.06, 07, 5/1/94; IDAPA 58.01.01.322.08, 4/5/00]

Excess Emissions

- 2.9 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions. The provisions of IDAPA 58.01.01.130-136 shall govern in the event of conflicts between Permit Condition 2.9 and the regulations of IDAPA 58.01.01.130-136.
- 2.9.1 The person responsible for or in charge of a facility during an excess emissions event shall, with all practicable speed, initiate and complete appropriate and reasonable action to correct the conditions causing such excess emissions event, to reduce the frequency of occurrence of such events, to minimize the amount by which the emission standard is exceeded, and shall, as provided below or upon request of the Department, submit a full report of such occurrence including a statement of all known causes and of the scheduling and nature of the actions to be taken.

[IDAPA 58.01.01.132, 4/5/00]

2.9.2 In all cases where startup, shutdown, or scheduled maintenance of any equipment or emission unit is expected to result or results in an excess emissions event, the owner or operator of the facility or emissions unit generating the excess emissions shall demonstrate compliance with IDAPA 58,01.01.133.01(a) through (d), including, but not limited to, the following:

[IDAPA 58.01.01.133, 4/5/00]

A prohibition of any scheduled startup, shutdown, or maintenance resulting in excess emissions shall
occur during any period in which an Atmospheric Stagnation Advisory and/or a Wood Stove Curtailment
Advisory has been declared by the Department.

[IDAPA 58.01.01.133.01.a, 3/20/97]

- Notifying the Department of the scheduled excess emissions event as soon as reasonably possible, but
 no later than two hours prior to the start of the excess emission event, unless the owner or operator
 demonstrates to the Department's satisfaction that a shorter advanced notice was necessary.
 [IDAPA 58.01.01.133.01.b. 4/5/001]
- The owner or operator of a source of excess emissions shall report and record the information required pursuant to Permit Conditions 2.9.4 and 2.9.5 and IDAPA 58.01.01.135 and 136 for each excess emissions event due to startup, shutdown, or scheduled maintenance.

[IDAPA 58.01.01.133.01.c, 3/20/97]

2.9.3 In all cases where upset or breakdown of equipment or an emissions unit, or the initiation of safety measures, results or may result in an excess emissions event, the owner or operator of the facility or emissions unit generating the excess emissions shall demonstrate compliance with IDAPA 58.01.01.134.01(a) and (b) and the following:

[IDAPA 58.01.01.134, 4/5/00]

Permittee: U.S. Department of Energy, Idaho Branch Office

Date Issued: October 29, 2002

Location: Idaho National Engineering and Environmental Laboratory

Date Expires: October 29, 2005

Research Complex, Idaho Falls, Idaho

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

2.9.3.1 For all equipment or emissions units from which excess emissions result during upset or breakdown conditions, or for other situations that may necessitate the implementation of safety measures which cause excess emissions, the facility owner or operator shall comply with the following:

[IDAPA 58.01.01.134.02, 4/5/00]

The owner or operator shall immediately undertake all appropriate measures to reduce and, to the extent
possible, eliminate excess emissions resulting from the event and to minimize the impact of such excess
emissions on the ambient air quality and public health.

[IDAPA 58.01.01.134.02.a, 4/5/00]

- The owner or operator shall notify the Department of any upset, breakdown, or safety event that results in excess emissions. Such notification shall identify the time, specific location, equipment or emissions unit involved, and (to the extent known) the cause(s) of the occurrence. The notification shall be given as soon as reasonably possible, but no later than 24 hours after the event, unless the owner or operator demonstrates to the Department's satisfaction that the longer reporting period was necessary.
 [IDAPA 58.01.01.134.02.b. 4/5/00]
- The owner or operator shall report and record the information required pursuant to Permit Conditions 2.9.4 and 2.9.5 and IDAPA 58.01.01.135 and 136 for each excess emissions event caused by an upset, breakdown, or safety measure.

[IDAPA 58.01.01.134.02.c, 3/20/97]

2.9.3.2 During any period of excess emissions caused by upset, breakdown, or operation under facility safety measures, the Department may require the owner or operator to immediately reduce or cease operation of the equipment or emissions unit causing the excess emissions until such time as the condition causing the excess emissions has been corrected or brought under control. Such action by the Department shall be taken upon consideration of the factors listed in IDAPA 58.01.01.134.03 and after consultation with the facility owner or operator.

[IDAPA 58.01.01.134.03, 4/5/00]

2.9.4 A written report for each excess emissions event shall be submitted to the Department by the owner or operator no later than 15 days after the beginning of such an event. Each report shall contain the information specified in IDAPA 58.01.01.135.02.

[IDAPA 58.01.01.135.01, 3/20/97; IDAPA 58.01.01.135.02, 4/5/00]

2.9.5 The owner or operator shall maintain excess emissions records at the facility for the most recent five-calendar-year period. The excess emissions records shall be made available to the Department upon request. The excess emissions records shall include the information requested by IDAPA 58.01.01.136.03(a) and (b) as summarized in the following:

[IDAPA 58.01.01.136.01, 02, 3/20/97; IDAPA 58.01.01.136.03, 4/5/00]

 An excess emissions record book for each emissions unit or piece of equipment containing copies of all reports that have been submitted to the Department pursuant to IDAPA 58.01.01.135 for the particular emissions unit or equipment.

[IDAPA 58.01.01.136.03.a, 4/5/00]

Permittee: U.S. Department of Energy, Idaho Branch Office

Date Issued: October 29, 2002

Location: Idaho N

Idaho National Engineering and Environmental Laboratory

Date Expires: October 29, 2005

Research Complex, Idaho Falls, Idaho

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

 Copies of all startup, shutdown, and scheduled maintenance procedures and upset, breakdown, and safety preventative maintenance plans which have been developed by the owner or operator in accordance with IDAPA 58.01.01.133 and 134, and facility records as necessary to demonstrate compliance with such procedures and plans.

[IDAPA 58.01.01.136.03.b, 3/20/97; IDAPA 58.01.01.130-136, 4/5/00 (state-only; federally enforceable upon approval into the SIP); IDAPA 58.01.01.322.08.b, 3/23/981

Open Burning

2.10 The permittee shall comply with the requirements of IDAPA 58.01.01.600-616, *Rules for Control of Open Burning.*

[IDAPA 58.01.01.600-616, 4/5/00]

Renovation/Demolition

2.11 The permittee shall comply with all applicable portions of 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

[40 CFR 61, Subpart M]

Regulated Substances for Accidental Release Prevention

- 2.12 An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, shall comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR 68 no later than the latest of the following dates:
 - Three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR 68.130.
 - The date on which a regulated substance is first present above a threshold quantity in a process.

 [40 CFR 68.10 (a)]

Fuel-burning Equipment

2.13 The permittee shall not discharge to the atmosphere from any fuel-burning equipment particulate matter in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products.

[IDAPA 58.01.01.676-677, 5/1/94]

Sulfur Content

- 2.14 No person shall sell, distribute, use, or make available for use any distillate fuel oil containing more than the following percentages of sulfur:
 - ASTM Grade 1 fuel oil 0.3% by weight.
 - ASTM Grade 2 fuel oil 0.5% by weight.

[IDAPA 58.01.01.728, 5/1/94]

Permittee: U.S. Department of Energy, Idaho Branch Office

Date Issued: October 29, 2002

Location:

Idaho National Engineering and Environmental Laboratory

Date Expires: October 29, 2005

Research Complex, Idaho Falls, Idaho

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

Process Weight Rate

- 2.15 The permittee shall not emit to the atmosphere PM in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour:
 - a. If PW is less than 9,250 lb/hr, $E = 0.045(PW)^{0.60}$
 - If PW is equal to or greater than 9,250 lb/hr, E = 1.10(PW)^{0.25}

[IDAPA 58.01.01.701.01, 4/5/00]

2.15.1 The permittee shall install, maintain, and operate a cyclone in the wood shop to control emissions from wood shop operations.

[IDAPA 58.01.01.322.14, 5/1/94]

Recycling and Emissions Reductions

2.16 The permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, Recycling and Emissions Reduction.

[40 CFR 82, Subpart F]

Compliance Testing

2.17 If testing is required, the permittee shall provide notice of intent to test to the Department at least 15 days prior to the scheduled test or shorter time period as provided in a permit, order, consent decree, or by Department approval. The Department may, at its option, have an observer present at any emissions tests conducted on a source. The Department requests that such testing not be performed on weekends or state holidays.

All testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior Department approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by the Department for any testing deviations, the Department may determine that the testing does not satisfy the testing requirements. Therefore, prior to conducting any compliance test, the permittee is encouraged to submit in writing to the Department, at least 30 days in advance, the following for approval:

- · The type of test method to be used
- Any extenuating or unusual circumstances regarding the proposed test
- · The proposed schedule for conducting and reporting the test

Within 30 days following the date in which a compliance test required by this permit is concluded, the permittee shall submit a report to the Department for the respective test. The compliance test report shall include all process operating data collected during the test period as well as the test results, raw test data, and associated documentation, including any approved test protocol.

Permittee: U.S. Department of Energy, Idaho Branch Office

Date Issued: October 29, 2002

Location: Idaho National Engineering and Environmental Laboratory

Research Complex, Idaho Falls, Idaho

Date Expires: October 29, 2005

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

The proposed test date(s), test date rescheduling notice(s), compliance test report, and all other correspondence shall be sent to:

Air Quality Permit Compliance Department of Environmental Quality Idaho Falls Regional Office 900 N. Skyline, Suite B Idaho Falls. ID 83402

Phone: (208) 528-2650

Fax: (208) 528-2695

[IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 5/1/94]

Test Methods

2.18 If testing is required, the permittee shall use the test methods listed in Table 2.2 to measure the pollutant emissions.

Pollutant	Test Method*	Special Conditions
PM	EPA Method 5	
PM ₁₀	EPA Method 201.a and EPA Method 202	
NOx	EPA Method 7	
\$O₂	EPA Method 6	
co	EPA Method 10	
VOC	EPA Method 25	
Opacity	EPA Method 9	Sources subject to NSPS use IDAPA 58.01.01.625 and Method 9; otherwise use IDAPA 58.01.01.625 only.

Table 2.2 EPA REFERENCE TEST METHODS

Monitoring and Recordkeeping

2.19 The permittee shall maintain sufficient recordkeeping to assure compliance with all of the terms and conditions of this operating permit. Recording of monitoring information shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to Department representatives upon request.

[IDAPA 58.01.01.322.07, 5/1/94]

^{*} Or Department-approved alternative in accordance with IDAPA 58.01.01.157

U.S. Department of Energy, Idaho Branch Office Permittee:

Date Issued: October 29, 2002

Location:

Idaho National Engineering and Environmental Laboratory

Research Complex, Idaho Falls, Idaho

Date Expires: October 29, 2005

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

Reports and Certifications

2.20 All periodic reports and certifications required by this permit shall be submitted to the Department and/or EPA Region 10 by the submittal date specified in the permit, or within 30 days of the end of each specified reporting period. Excess emissions reports and notifications shall be submitted in accordance with IDAPA 58.01.01.130-136. Reports, certifications, and notifications shall be submitted to:

> Air Quality Permit Compliance Department of Environmental Quality Idaho Falls Regional Office 900 N. Skyline, Suite B Idaho Falls, ID 83402

The periodic compliance certification required by General Provision 21 shall also be submitted within 30 days of the end of the specified reporting period to:

EPA Region 10 Air Operating Permits, OAQ-107 1200 Sixth Ave. Seattle, WA 98101

[IDAPA 58.01.01.322.08, 11, 5/1/94]

Storage Vessels for Petroleum Liquids

2.21.1 The permittee shall keep readily accessible records showing the dimension of the fuel storage tank vessel and an analysis showing the capacity of the storage vessel.

[40 CFR 60.110b(c), 40 CFR 60.116b(b)]

2.21.2 The permittee shall keep copies of the records required by Permit Condition 2.21.1 for the life of the fuel storage tank.

[40 CFR 60.110b(c), 40 CFR 60.116b(a)]

Permittee: U.S. Department of Energy, Idaho Branch Office

Date Issued: October 29, 2002

Location:

Idaho National Engineering and Environmental Laboratory

Research Complex, Idaho Fails, Idaho

Date Expires: October 29, 2005

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

3. RADIONUCLIDE SOURCES

Summary Description

The following is a narrative description of the radiological sources regulated in this Tier I operating permit. This description is for informational purposes only.

The IRC complex has radiological sources subject to regulation under 40 CFR Part 61, Subpart H, "National Emission Standards for Emissions of Radionuclides Other than Radon from Department of Energy Facilities." Potential radionuclide emissions are from laboratory activities. The state of Idaho has not been delegated the authority to implement and enforce the radionuclide emissions program established in 40 CFR Part 61, Subpart H.

Table 3.1 contains only a summary of the requirements that apply to the radiological sources at the facility. Specific permit requirements are listed below Table 3.1.

Table 3.1 SUMMARY OF APPLICABLE REQUIREMENTS

Permit Condition	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring & Recordkeeping Requirements
3.1	Effective dose equivalent	Not greater than 10 mrem/yr	40 CFR Part 61, Subpart H	3.2.1-3.2.3, 3.3

Permit Limits / Standard Summary

3.1 The permittee shall not emit radionuclides from the facility in amounts exceeding those that would cause any member of the public to receive an effective dose equivalent of 10 mrem/yr.

[40 CFR 61.92]

Monitoring & Recordkeeping Requirements

3.2 The permittee shall record the annual possession quantities in curies per year (Ci/yr) of radionuclides identified 40 CFR 61, Appendix E, Table 1.

[40 CFR 61, Appendix E]

3.2.1 If the annual possession quantities of any radionuclide exceeds the quantity listed in 40 CFR Part 61, Appendix E, Table 1, the permittee shall comply with the emission monitoring and test procedures in accordance with 40 CFR 61.93.

[40 CFR 61.93]

3.2.2 The permittee shall maintain records documenting the source of input parameters, including the results of all measurements upon which they are based, the calculations and/or analytical methods used to derive values for input parameters, and the procedure used to determine possession quantities or the effective dose equivalent.

[40 CFR 61.95]

Permittee: U.S. Department of Energy, Idaho Branch Office

Date Issued: October 29, 2002

Location: Idaho National Engineering and Environmental Laboratory

Date Expires: October 29, 2005

Research Complex, Idaho Falls, Idaho

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

Reporting

3.3 The permittee shall prepare an annual report in accordance with 40 CFR 61.94(a) and submit the report to the EPA headquarters with a copy to EPA, Region X and to the Department by June 30. The annual report shall include, but is not limited to, the annual possession quantities of each radionuclide at the facility or the results of monitoring and dose calculations required in 40 CFR 61.93. Applicable information required by 40 CFR 61.94(b), (c), and (d) shall be included in the annual report.

[40 CFR 61.94(a), (b), (c), and (d)]

Permittee:

U.S. Department of Energy, Idaho Branch Office Idaho National Engineering and Environmental Laboratory

Date issued:

October 29, 2002

Research Complex, Idaho Falls, Idaho

Date Expires: October 29, 2005

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

INSIGNIFICANT ACTIVITIES 4.

Location:

Activities and emission units identified as insignificant under IDAPA 58.01.01.317.01(b) are listed in the Tier I operating permit to qualify for a permit shield.

Table 4.1 INSIGNIFICANT ACTIVITIES

Description	Insignificant Activities IDAPA 58.01.01.317.01(b)(i) Citation
Organic storage tank #635A - 300 gallon capacity	IDAPA 58.01.01.317.01.b.i(3)
Organic storage tank #718 – 500 gallon capacity	IDAPA 58.01.01.317.01.b.i(3)
Organic storage tank #725 - 2,500 gallon capacity	IDAPA 58.01.01.317.01.b.i(3)
Boiler, Building IRC 603 – 2.65 MMBtu/hr	IDAPA 58.01.01.317.01.b.i(18)
Boiler, Building IRC 603 – 2.65 MMBtu/hr	IDAPA 58.01.01.317.01.b.i(18)
Welding activities, Building IRC 603	IDAPA 58.01.01.317.01.b.i(9)
Wood shop, Building IRC 603	IDAPA 58.01.01.317.01.b.i(30)
Painting activities, Building IRC 603	IDAPA 58.01.01.317.01.b.i(17)
Analytical laboratories, various buildings	IDAPA 58.01.01.317.01.b.i(30)
185-hp firewater pump, Building IRC 635	IDAPA 58.01.01.317.01.b.i(7)
355-hp emergency generator, Building IRC 603	IDAPA 58.01.01.317.01.b.i(7)
75-kw emergency generator, Building IRC 602	IDAPA 58.01.01.317.01.b.i(7)

There are no monitoring, recordkeeping, or reporting requirements for insignificant emission units or 4.1 activities beyond those required in the Facility-wide Permit Conditions.

Permittee: U.S. Department of Energy, Idaho Branch Office

Date Issued: October 29, 2002

Location: Idaho National Engineering and Environmental Laboratory

Date Expires: October 29, 2005

Research Complex, Idaho Falls, Idaho

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

5. TIER I OPERATING PERMIT GENERAL PROVISIONS

General Compliance

1. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application.

[IDAPA 58.01.01.322.15.a, 5/1/94; 40 CFR 70.6(a)(6)(i)]

- It shall not be a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the terms and conditions of this permit.
 [IDAPA 58.01.01.322.15.b, 5/1/94; 40 CFR 70.6(a)(6)(ii)]
- Any permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit
 application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such
 supplementary facts or corrected information.

[IDAPA 58.01.01.315.01, 5/1/94; 40 CFR 70.5(b)]

Reopening

4. This permit may be revised, reopened, revoked and reissued, or terminated for cause. Cause for reopening exists under any of the circumstances listed in IDAPA 58.01.01.386. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable in accordance with IDAPA 58.01.01.360 through 369.

[IDAPA 58.01.01.322.15.c, 5/1/94; IDAPA 58.01.01.386, 3/19/99; 40 CFR 70.7(f)(1) and (2); 40 CFR 70.6(a)(6)(iii)]

5. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[IDAPA 58.01.01.322.15.d, 5/1/94; 40 CFR 70.6(a)(6)(iii)]

Property Rights

6. This permit does not convey any property rights of any sort, or any exclusive privilege.

[IDAPA 58.01.01.322.15.e, 5/1/94; 40 CFR 70.6(a)(6)(iv)]

Information Requests

7. The permittee shall furnish all information requested by the Department, within a reasonable time, that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.

[Idaho Code §39-108; IDAPA 58.01.01.122, 5/1/94; IDAPA 58.01.01.322.15.f, 4/5/00; 40 CFR 70.6(a)(6)(v)]

U.S. Department of Energy, Idaho Branch Office Date Issued: October 29, 2002 Permittee:

Idaho National Engineering and Environmental Laboratory Location: Date Expires: October 29, 2005

Research Complex, Idaho Falls, Idaho

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

8. Upon request by the Department, the permittee shall furnish copies of records required to be kept by this permit. For information claimed to be confidential, the permittee may furnish such records along with a claim of confidentiality in accordance with Idaho Code §9-342A and applicable implementing regulations including

[IDAPA 58.01.01.322.15.g, 5/1/94; IDAPA 58.01.01.128, 4/5/00; 40 CFR 70.6(a)(6)(v)]

Severability

IDAPA 58.01.01.128.

9. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

[IDAPA 58.01.01.322.15.h, 5/1/94; 40 CFR 70.6(a)(5)]

Changes Requiring Permit Revision or Notice

The permittee may not commence construction or modification of any stationary source, facility, major facility. 10. or major modification without first obtaining all necessary permits to construct or an approval under IDAPA 58.01.01.213, or complying with IDAPA 58.01.01.220 through 223. The permittee shall comply with IDAPA 58.01.01.380 through 386 as applicable.

> [IDAPA 58.01.01.200-223, 4/5/00; IDAPA 58.01.01.322.15.i, 380-386, 3/19/99; 40 CFR 70.4(b)(12), (14) and (15), and 70.7(d) and (e)]

Changes that are not addressed or prohibited by the Tier I operating permit require a Tier I operating permit 11. revision if such changes are subject to any requirement under Title IV of the CAA, 42 U.S.C. Permit Condition 7651 through 7651c, or are modifications under Title I of the CAA, 42 U.S.C. Permit Condition 7401 through 7515. Administrative amendments (IDAPA 58.01.01.381), minor permit modifications (IDAPA 58.01.01, 383). and significant permit modifications (IDAPA 58.01.01.382) require a revision to the Tier I operating permit. IDAPA 58.01.01.502(b)(10) charges are authorized in accordance with IDAPA 58.01.01.384. Off-permit changes and required notice are authorized in accordance with IDAPA 58.01.01.385.

> [IDAPA 58.01.01.381-385, 3/19/99; IDAPA 58.01.01.209.05, 5/1/94; 40 CFR 70.4(b)(14) and (15)]

Federal and State Enforceability

- 12. Unless specifically identified as a "state-only" provision, all terms and conditions in this permit, including any terms and conditions designed to limit a source's potential to emit, are enforceable: (i) by the Department in accordance with state law; and (ii) by the United States or any other person in accordance with federal law. [IDAPA 58.01.01.322.15.j, 5/1/94; 40 CFR 70.6(b)(1) and (2)]
- 13. Provisions specifically identified as a "state-only" provision are enforceable only in accordance with state law. "State-only" provisions are those that are not required under the Federal Clean Air Act, or under any of its applicable requirements, or those provisions adopted by the state prior to federal approval.

[Idaho Code §39-108; IDAPA 58.01.01.322.15.k, 3/23/98]

Permittee: U.S. Department of Energy, Idaho Branch Office

Date Issued: October 29, 2002

Idaho National Engineering and Environmental Laboratory

Date Expires: October 29, 2005

Research Complex, Idaho Falls, Idaho

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

Inspection and Entry

Location:

- 14. Upon presentation of credentials, the permittee shall allow the Department or an authorized representative of the Department to do the following:
 - a. Enter upon the permittee's premises where a Tier I source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108; IDAPA 58.01.01.322.15.i, 3/19/99; 40 CFR 70.6(c)(2)]

New Requirements During Permit Term

15. The permittee shall comply with applicable requirements that become effective during the permit term on a timely basis.

[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.10.a.ii, 5/1/94; 40 CFR 70.6(c)(3) citing 70.5(c)(8)]

Fees

16. The owner or operator of a Tier I source shall pay annual registration fees to the Department in accordance with IDAPA 58.01.01.525 through IDAPA 58.01.01.538.

[IDAPA 58.01.01.322.15.n, 5/1/94; 40 CFR 70.6(a)(7)]

Certification

17. All documents submitted to the Department shall be certified in accordance with IDAPA 58.01.01.123 and comply with IDAPA 58.01.01.124.

[IDAPA 58.01.01.322.15.o, 5/1/94; 40 CFR 70.6(a)(3)(iii)(A); 40 CFR 70.5(d)]

Renewal

18. a. The owner or operator of a Tier I source shall submit an application to the Department for a renewal of this permit at least six months before, but no earlier than 18 months before, the expiration date of this operating permit. To ensure that the term of the operating permit does not expire before the permit is renewed, the owner or operator is encouraged to submit a renewal application nine months prior to the date of expiration.

[IDAPA 58.01.01.313.03, 4/5/00; 40 CFR 70.5(a)(1)(iii)]

Permittee: U.S. Department of Energy, Idaho Branch Office

Date Issued: October 29, 2002

Location: Idaho N

Idaho National Engineering and Environmental Laboratory

Date Expires: October 29, 2005

Research Complex, Idaho Falls, Idaho

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

b. If a timely and complete application for a Tier I operating permit renewal is submitted, but the Department fails to issue or deny the renewal permit before the end of the term of this permit, then all the terms and conditions of this permit including any permit shield that may have been granted pursuant to IDAPA 58.01.01.325 shall remain in effect until the renewal permit has been issued or denied.

[IDAPA 58.01.01.322.15.p, 5/1/94; 40 CFR 70.7(b)]

Permit Shield

- 19. Compliance with the terms and conditions of the Tier I operating permit, including those applicable to all alternative operating scenarios and trading scenarios, shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
 - Such applicable requirements are included and are specifically identified in the Tier I operating permit; or
 - i. The Department has determined that other requirements specifically identified are not applicable and all of the criteria set forth in IDAPA 58.01.01.325.01(b) have been met.
 - b. The permit shield shall apply to permit revisions made in accordance with IDAPA 58.01.01.381.04 (administrative amendments incorporating the terms of a permit to construct), IDAPA 58.01.01.382.04 (significant modifications), and IDAPA 58.01.01.384.03 (trading under an emissions cap).
 - c. Nothing in this permit shall alter or affect the following:
 - Any administrative authority or judicial remedy available to prevent or terminate emergencies or imminent and substantial dangers;
 - ii. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance:
 - iii. The applicable requirements of the acid rain program, consistent with 42 U.S.C. Permit Condition 7651(g)(a); and
 - iv. The ability of EPA to obtain information from a source pursuant to Permit Condition 114 of the CAA; or the ability of the Department to obtain information from a source pursuant to Idaho Code 39-108 and IDAPA 58.01.01.122.

[Idaho Code 39-108 and 112; IDAPA 58.01.01.122, 322.15.m, 325, 5/1/94; IDAPA 58.01.01.381.04, 382.04, 383.05, 384.03, 385.03, 3/19/99; 40 CFR 70.6(f)]

Compliance Schedule and Progress Reports

20. a. For each applicable requirement for which the source is not in compliance, the permittee shall comply with the compliance schedule incorporated in this permit.

Permittee: U.S. Department of Energy, Idaho Branch Office Da

Date Issued: October 29, 2002

Location: Idaho National Engineering and Environmental Laboratory

Date Expires: October 29, 2005

Research Complex, Idaho Falls, Idaho

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

b. For each applicable requirement that will become effective during the term of this permit and that provides a detailed compliance schedule, the permittee shall comply with such requirements in accordance with the detailed schedule.

- c. For each applicable requirement that will become effective during the term of this permit that does not contain a more detailed schedule, the permittee shall meet such requirements on a timely basis.
- d. For each applicable requirement with which the permittee is in compliance, the permittee shall continue to comply with such requirements.

[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.9, 10, 5/1/94; 40 CFR 70.6(c)(3) and (4)]

Periodic Compliance Certification

- 21. a. The permittee shall submit compliance certifications during the term of the permit for each emissions unit to the Department and EPA as follows:
 - Compliance certifications for all emissions units shall be submitted annually beginning twelve (12)
 months from the permit issuance date, or more frequently if specified by the underlying applicable
 requirement or elsewhere in this permit by the Department;
 - c. The compliance certification for each emissions unit shall address all of the terms and conditions contained in the Tier I operating permit that are applicable to such emissions unit including emissions limitations, standards, and work practices;
 - d. The compliance certification shall be in an itemized form providing the following information (provided that the identification of applicable information may cross-reference the permit or previous reports as applicable):
 - The identification of each term or condition of the Tier I operating permit that is the basis of the certification;
 - ii. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required by this Tier I operating permit. If necessary, the owner or operator shall identify any other material information that must be included in the certification to comply with Permit Condition 113(c)(2) of the CAA which prohibits knowingly making a false certification or omitting material information;
 - iii. The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Paragraph 9.21.c.ii above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred:
 - iv. Such other facts as the Department may require to determine the compliance status of the source.

Permittee: U.S. Department of Energy, Idaho Branch Office Date Issued: October 29, 2002

Location: Idaho National Engineering and Environmental Laboratory

Date Expires: October 29, 2005

Research Complex, Idaho Falls, Idaho

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

e. All original compliance certifications shall be submitted to the Department and a copy of all compliance certifications shall be submitted to the EPA.

[IDAPA 58.01.01.322.11, 5/1/94; 40 CFR 70.6(c)(5)(iii) as amended, 62 Fed. Reg. 54900, 54946, 10/22/97; 40 CFR 70.6(c)(5)(iv)]

False Statements

22. No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.

IIDAPA 58.01.01.125, 3/23/981

No Tampering

23. No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Semiannual Monitoring Reports

24. In addition to all applicable reporting requirements identified in this permit, the permittee shall submit reports of any required monitoring at least every six months starting six months from the date of permit issuance. All instances of deviations from this operating permit's requirements must be clearly identified in the report. All required reports must be certified in accordance with IDAPA 58.01.01.123.

[IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.322.08.c, 4/5/00; 40 CFR 70.6(a)(3)(iii)]

Reporting Deviations and Excess Emissions

25. The permittee shall promptly report all deviations from permit requirements including upset conditions, their probable cause, and any corrective actions or preventive measures taken. For excess emissions, the report shall be made in accordance with IDAPA 58.01.01.130-136. For all other deviations, the report shall be made in accordance with IDAPA 58.01.01.322.08.c, unless otherwise specified in this permit.

[IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.135, 4/5/00; 40 CFR 70.6(a)(3)(iii)]

Permit Revision Not Required

26. No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit.

[IDAPA 58.01.01.322.05.b, 4/5/00; 40 CFR 70.6(a)(8)]

Permittee: U.S. Department of Energy, Idaho Branch Office Date Issued: October 29, 2002
Location: Idaho National Engineering and Environmental Laboratory

Date Issued: October 29, 2005

Research Complex, Idaho Falls, Idaho

Catober 29, 2005

The permittee is hereby allowed to operate the equipment described herein subject to all terms and conditions of the permit.

Emergency

27. In accordance with IDAPA 58.01.01.332, an "Emergency" as defined in IDAPA 58.01.01.008, constitutes an affirmative defense to an action brought for noncompliance with such technology-based emissions limitation if the conditions of IDAPA 58.01.01.332.02 are met.

[IDAPA 58.01.01.332.01, 3/19/99; 40 CFR 70.6(g)]